

Projects are to be carried out in groups of up to 5 people and no less than 3 people per group. Each group needs to choose one project topic. A topic has associated reading from [VMLS], [LALFD] and in certain cases [SWJ]. The available project topics are detailed here:

<https://courses.smp.uq.edu.au/MATH7502/2019/#project-report>

Once a group is formed, a nominated group contact person should e-mail the course coordinator about the group members and the topic selected. Groups are to be formed no later than September 7, 2019.

The group members are to read the assigned reading for the project report and carry out the following:

1. Within the group discuss the assigned reading to make sure all unclear points are clear to all group members.
2. Create a formatted one page summary of the content, highlighting the main methods, tools, results and applications. This needs to be a brief and sharp write-up accessible to other students in the course that haven't studied the specific topic. A good summary will possess qualities similar to (part-of) a good Wiki summary. It is to be handed in as a single A4 PDF page. Including formulas and images is encouraged.
3. Create a Julia Jupyter notebook with one to three code demonstrations of the results and methods of the topic. Code snippets similar to those of the [SWJ] book are encouraged. The Jupyter notebook should also have some mark-down formatted cells with equations where appropriate. This notebook should be a demonstration of the concepts learned.
4. Create a YouTube video, no longer than 6 minutes, demonstrating the Jupyter notebook and the code it contains. Code snippets may be executed with several different parameters in a way that demonstrates the results and methods.
5. The project is to be handed in via an e-mail containing the one page pdf document, the .ipnb file, a pdf printout of the ipnb file, any supporting files needed to run the .ipnb file (if applicable), and a link to the YouTube video.